

## *Araucoscia* Verhoeff, 1939 is a junior synonym of *Pseudophiloscia* Budde-Lund, 1904

(Crustacea, Isopoda, Oniscidea)

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The two philosciid genera *Araucoscia* Verhoeff, 1939 and *Pseudophiloscia* Budde-Lund, 1904, both recently reexamined by their type material have to be considered synonyms. New material from Chile, where both genera were reported from, is attributed to *Pseudophiloscia inflexa* Budde-Lund, 1904. The characters found in this species match the characters found in *Araucoscia*. Thus, *Araucoscia* is considered a junior synonym of *Pseudophiloscia*.

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### Introduction

There are only few species of terrestrial isopods reported from Chile, among them some genera and species representing the evolutionary level of the philosciid facies. These genera are *Araucoscia* Verhoeff, 1939 and *Pseudophiloscia* Budde-Lund, 1904, both were subject to a reexamination of the type material (Leistikow 1998 a, b). For both taxa, autapomorphies were found but it appeared that the boundaries of *Araucoscia* were more restrictive than those of *Pseudophiloscia* and the suspicion arose that *Araucoscia* might be included in *Pseudophiloscia* (Leistikow 1998b). New material from Isola Wellington off the coast of southern Chile revealed the fact that the slight differences are even more inconspicuous to consider both species members of different genera. Moreover, some amendments to the diagnosis of *Pseudophiloscia* Budde-Lund, 1904 shall be given, particularly with respect to the mouth parts and noduli laterales, the diagnosis has to be expanded.

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### Systematic section

#### *Pseudophiloscia* Budde-Lund, 1904

*Paraphiloscia* Stebbing, 1900 in part  
*Araucoscia* Verhoeff, 1939

**Diagnosis.** Cephalothorax with linea supra-antennalis, no linea frontalis and only slight lateral lobes, compound eye with 15 ommatidia, pleon retracted from pereon. Antennula three-articulate, antennal flagellum three-articulate, apical bristle shorter than distal article, with moderately long free sensilla inserting basally. Mandible bearing molar penicil consisting of 10 branches, each arising separately, lacinia mobilis of left side bulky, lateral endite of maxillula with up to 10 simple teeth, medial endite

without apical point, maxilla with lateral lobe three times broader than medial one, maxilliped with endite lacking knob-like penicil, basipodite with sulcus lateralis.

Pereopods slender, inner claw of dactylus short, dactylar seta simple, carpal antenna-grooming brush distinct, ornamental sensory spine with handlike apex, coxal plates narrow, lacking sulcus marginalis and gland pores, three rows of noduli laterales, on coxal plate VII, five noduli laterales. Pleopods without respiratory areas, lateral margin bearing sensory spines, male endopodite of pleopod 1 acute. Uropod with lateral groove, endopodite inserting proximally of exopodite.

Species included: *Pseudophiloscia inflexa* Budde-Lund, 1904, *P. angusta* (Dana, 1852), *P. chilnica* (Verhoeff, 1939) comb. nov.

### *Pseudophiloscia inflexa* Budde-Lund, 1904

Figs 1-5

**Material examined.** 1♂, 1♀, Chile, Isola Wellington, Puerto Eden, leg. Daccordi, 12.2.1988, MZUF no. 3183; Microscopic slides of 1♂ same data as above.

#### Additions to description

The species was described by Budde-Lund (1904), figuring some of the mouth parts and the habitus, a re-examination of the syntypes was performed by Leistikow (1998b). Since the material was incomplete to some extent, information on the characters not observed will be given:

**Colour.** Dorsally chestnut with light spots, on coxal plates two light areas separated by darker chestnut, paramedian line darker than remaining tegument, cephalothorax chestnut with small light spots, pereopods chestnut, pleopods light yellowish brown.

**Pereon.** Tegument shiny, covered with slender tricorn-like setae, three noduli laterales on coxal plates I-VI, coxal plate VII bearing five noduli laterales, four along the distal margin, the most medial one in paramedian position on pereonite (Figs 1, 4)

**Antenna.** Apical bristle as long as distal flagellar article, free sensilla near basis almost as long as apical bristle (Fig. 3)

**Maxillula.** Medial endite rather bulbous, subapical tip very inconspicuous, penicils stout, lateral endite with a small tooth paraterally on rostral surface (Fig. 5).

**Pereopods.** Male pereopod 7 with small setose area on ischium (Fig. 2).

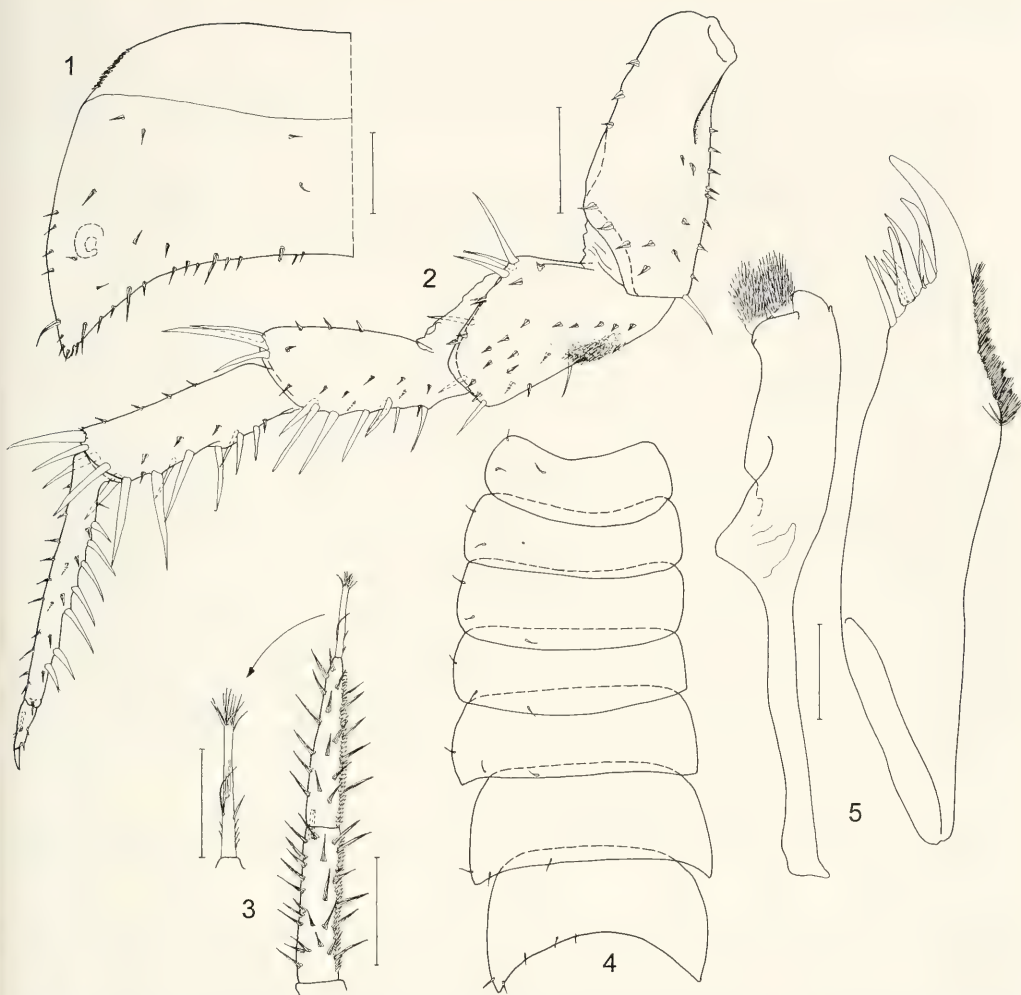
**Discussion.** As stated previously (Leistikow 1998a,b), the three species *Araucoscia chilnica* Verhoeff, 1939, *Pseudophiloscia angusta* (Dana, 1852) and *P. inflexa* Budde-Lund, 1904 form a monophyletic group characterized by the following autapomorphies:

- Two rows of noduli laterales per side [only one row of noduli laterales per side]
- Coxal plates very narrow [coxal plates of normal breadth]
- Coxal plates without sulcus marginalis [coxal plates with sulcus marginalis]
- Lateral endite of maxillula with about ten simple teeth not fitting the 4+6-pattern [maxillula with 4+6 teeth, five of inner set cleft]

The inclusion of the species *chilnica* into the genus *Pseudophiloscia* Budde-Lund, 1904 aims at the establishment of a monophylum separated from other so-called genera by a gap in character states, i.e., the traditionally accepted characters for the characterisation of genera (Taiti & Ferrara 1980) should unite species in monophyletic taxa, called genera, which are separated from other genera by distinct character states not allowing a continuum from one character state to another. Consequently, all the species of "philosciid" Oniscoidea bearing the above mentioned characters are placed in *Pseudophiloscia*. The slight differences in the morphology of the maxillula are only of interest on the species level.

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**Figs 1-5.** *Pseudophiloscia inflexa* Budde-Lund, 1904, male mounted on microscopic slides. **1.** Coxal plate VII, scale bar = 400  $\mu\text{m}$ . **2.** Male pereopod 7, rostral view, scale bar = 400  $\mu\text{m}$ . **3.** Articles 2 and 3 of antennal flagellum with detail of apical organ, scale bar = 200  $\mu\text{m}$  and 100  $\mu\text{m}$ , respectively. **4.** Scheme of position of noduli laterales. **5.** Maxillula in rostral view, scale bar = 100  $\mu\text{m}$ .

### References

- Budde-Lund, G. 1904. A revision of "Crustacea Isopoda terrestria", with additions and illustrations. 2. Sperilloninae. 3. Armadillo. - Copenhagen: 33-144
- Leistikow, A. 1998a. Redcriptions of terrestrial Isopoda (Crustacea: Oniscidea) from Chile and Peru. - Spixiana **21**(3): 215-225
- 1998b. The genus *Pseudophiloscia* Budde-Lund, 1912 in South America. - Mitt. Mus. Naturkde. Berlin, zool. Reihe **74**(2): 233-241
- Taiti, S. & F. Ferrara 1980. The family Philosciidae in Africa, south of the Sahara. - Mon. zool. ital. (n. s.) **13**: 53-98
- Verhoeff, K. W. 1939. Von Dr. G.H. Schwabe in Chile gesammelte Isopoda terrestria, Diplopoda und Chilopoda. - Zeitschr. f. wiss. Zool. **8**: 301-324